days). Patients seen as an interval referral had had symptoms of recurrence for a median time of 3 weeks (range 2 days–1 year) before consulting a doctor. This compared with a median of 4 weeks (range 2 days–4 months) for those attending routinely.

Discussion: Our experience established that recurrent breast cancer is rarely detected as the result of routine clinic examination. Surveillance imaging also has a low yield. In our practice most recurrent disease is detected as the result of an interval appointment made by patient. Routine hospital-based follow-up of breast cancer patients appears to be inefficient and unnecessary. We believe that given adequate preparation and education an improved system should be implemented whereby patients are discharged to their GPs upon completion of their treatment, with immediate access to specialist clinic review should the need arise.

O-97. SHOULD WE FOLLOW BREAST CANCER PATIENTS

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It has been routine practice for breast cancer patients in this country to be followed up in breast clinics regularly in order to detect locoregional recurrence and distant metastases.

Aim: To review breast cancer recurrences and see whether they are detected in routine follow up clinics.

Methods: Retrospective study based on 238 consecutive patients of breast cancer treated in 1995 in our hospital. These patients have now been followed up for at least 5 years.

Results: Operation was performed in 195 followed by radiotherapy, chemotherapy, Tamoxifen alone or combination of these. A total of 51 (21%) were found to have local recurrence or metastatic disease. 30 (12%) had locoregional recurrence, 11 (4.6%) of these were subsequently found to have distant metastases. 17 of 30 were detected at a routine visit on clinical examination and subsequently confirmed by further investigations. 21 (9%) developed distant metastases only. 9 of 21 were diagnosed at a routine clinic visit.

There was an association between metastatic disease and younger age, higher grade of primary tumour and advanced stage of disease, at first presentation. This was however not the case with locoregional recurrences.

Conclusion: A significant percentage of breast cancer recurrences, both locoregional and distant, are detected at routine follow up clinics. The ideal frequency of follow up visits to the clinic is not known, but sub groups of patients should be identified, based on age and histopathological characteristics, who would benefit from more frequent follow up.

O-98. INCIDENCE OF LYMPH NODE METASTASES IN INFILTRATING BREAST CANCERS OF LESS THAN 10 MM

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Background: Axillary clearance carries with it significant morbidity. Some studies have suggested that axillary surgery may be avoided in women with invasive cancers of 5 mm or less as the incidence of node positivity in this group is small.

Methods: 412 patients with invasive cancers less than 10 mm treated between 1995 and 2000 were identified from the prospective Greater Glasgow Health Board Audit of Operable breast cancer. The incidence of lymph node metastases in relation to tumour size, grade and ER status was examined.

Results:

Grade	5 mm (node +ve)	6–9 mm (node +ve)
1	5.9%	7%
2	11%	12.9%
3	27.8%	31.7%
Total	11.4%	12.4%

There was no significant difference in the incidence of nodal metastases between cancers of 5 mm and those of 6–9 mm ($p > 0.1$). High nuclear grade was associated with an increased risk of nodal spread ($p < 0.001$), as was a negative ER status ($p < 0.01$).

Conclusions: Our data demonstrates that grade 1 tumours of 10 mm or less have a very low incidence of nodal metastases and should therefore undergo a less radical axillary staging procedure, such as sentinel node biopsy, which would spare 95% of women an unnecessary axillary clearance.

O-99. USE OF HORMONAL REPLACEMENT THERAPY (HRT) DOES NOT ADVERSELY AFFECT SURVIVAL FROM SCREEN DETECTED BREAST CANCER

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Background and Aim: HRT increases the incidence of breast cancer but its effect on mortality from breast cancer remains controversial. To determine mortality in HRT users who developed screen detected cancers between 1991–97 we collected HRT history indicating duration, dose and type of HRT and present follow up of 589 women.

Methods and Study: A total of 589 patients with prevalent and first incident screen detected cancers between 1991–97 were studied. Of the total, 417 patients had never used HRT and 172 patients had a history of HRT. Women on HRT developed well differentiated tumours $p \leq 0.02$ but node status and tumour size did not differ between HRT users and non-users. The median follow up was 5 years and 11 months.

Results are summarised in the table.

HRT use	Current (n = 172)	Never (n = 417)	Total (n = 589)
Recurrence present	N = 22 (3%)	N = 41 (6%)	P = 0.3816
Survival (10 years)	91%	88%	P = 0.8495

Conclusion: Overall screen detected breast cancers have good prognosis. Prior HRT use does not adversely affect survival after diagnosis of breast cancer.

O-100. IS HORMONE REPLACEMENT (HRT) – RELATED BREAST CANCER MORE FAVOURABLE? A CASE-CONTROL STUDY

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Prolonged use of HRT increases the risk of developing breast cancer but it has been suggested that HRT-related breast cancer may carry a better prognosis since there is no increase in breast cancer deaths. The prognostic risk factors and outcome in patients who had ever taken HRT have been compared with those who had not, in a case-control study.

All women with primary breast cancer 1980–1999 (n = 1887) prospectively completed a detailed questionnaire on the duration and timing of hormonal therapy.

Patients who had ever used HRT (n = 388) were compared with the same number of never-users who were matched for age and age at diagnosis. The tumour size & grade, the number of positive nodes, the presence of vascular invasion and the oestrogen receptor status were compared between cases and controls. The Nottingham Prognostic Index (NPI) was estimated for both groups and absolute survival was compared by life table analysis (Kaplan Meier).

The mean duration of HRT in the ever-users was 3.7 years. The mean length of follow-up was 68 months. The mean age at diagnosis was 56 in the HRT users and 55 in controls. There was no difference between the 5 prognostic factors & there were similar numbers of cases and controls in each of the NPI prognostic groups: e.g. score < 3.4:43% v. 43%. There was a non-significant trend to a survival advantage in the control patients who had never received HRT. Log rank test (p = 0.57)

There was no evidence that HRT-related breast cancer has a more favourable outcome.

O-101. THE EFFECT OF FAMILY HISTORY ON PROGNOSIS IN BREAST CANCER

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Introduction: Patients with strong family history of breast cancer are more likely to develop a second cancer in the other breast and it is possible that they may have a worse prognosis. The aim of this study was to investigate the effect of family history (FH) on the pathological features of the breast cancer, bilaterality, recurrence-free interval and overall survival.

Method: All (122) patients under the age of 60 years with operable breast cancer and had an FH of one or more first-degree relatives were compared with (244) patients without an FH, matched for age and date of presentation. Tumour size, histological grading, vascular invasion, lymph node status and Nottingham Prognostic Index (NPI) were compared between the two groups. The incidence of synchronous and metachronous tumours in the other breast, disease-free interval and overall survival in each group were compared by life-table analysis.

Results: The pathological features in the two groups were very similar and both groups received similar surgical and adjuvant treatment. The mean follow up for patients with and without FH was 8.9 years and 8.7 years respectively. Patients with an FH had a non-significant trend to develop a metachronous cancer (9.8 v. 5.7%, p = 0.19). There was also a trend towards an overall survival advantage for patients with an FH but this was not statistically significant (p = 0.11).

Conclusion: Patients with a family history of breast cancer may have an increased incidence of a metachronous tumour in the contralateral breast but there is no evidence of worse prognosis.

O-102. C-erbB-2 IN LYMPH NODE NEGATIVE BREAST CANCER: PROGNOSTIC SIGNIFICANCE IN UNIVARIATE AND MULTIVARIATE ANALYSES

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Although the prognostic value of C-erbB-2 in invasive breast cancer patients who are node-positive is established, the data in node-negative patients is inconclusive. We have evaluated the prognostic significance of C-erbB-2 overexpression in a cohort of node-negative patients, none of whom received systemic adjuvant therapy.

Paraffin-embedded node negative primary breast cancers from 678 patients, treated at Nottingham City Hospital were studied immunohistochemically. C-erbB-2 staining was scored as 0, 1, 2, 3; scores of 2 and 3 were classified as positive. Univariate analysis was performed with chi-squared tests to compare immunoreactivity with known pathological and patient variables. Cox regression analysis was performed to evaluate C-erbB-2 over-expression as an independent prognostic factor.

40% (n = 254) of specimens showed overexpression of C-erbB-2. These patients had a worse disease-free interval (p = 0.008) and overall survival (p = 0.044). A significant relationship was also observed with high grade (p < 0.001), ER negativity (p < 0.001), young age (p = 0.028) and Nottingham Prognostic Index (NPI) (p < 0.001). No association was seen with menopausal status, vascular invasion or tumour size. In multivariate analysis for survival, when included with tumour size